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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,806	02/23/2004	Jan Roelof van der Meulen	1203.080	5460

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EXAMINER

QIN, JIANCHUN

ART UNIT

PAPER NUMBER

2837

DATE MAILED: 12/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/782,806

Applicant(s)

MEULEN, JAN ROELOF VAN DER

Examiner

Jianchun Qin

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen (U.S. Pat. No. 3893363) in view of DeArmas (U.S. Pat. No. 4362080).

Regarding claim 1, Cohen teaches a set of clave blocks (18, 20, or 22, 24) each comprising a rigid body made of solid material (col. 2, lines 40-44), said body having an open cavity therewithin defined solely by said solid material (inherent to temple blocks 18, 20, or cowbells 22, 24).

Cohen does not mention expressly: said bodies having substantially equal exterior dimensions and different volumes of said open cavities therewithin provided to generate musical tones of a variety of pitches.

DeArmas teaches a set of clave blocks, including bodies having open cavities, and substantially equal exterior dimensions and different volumes of said open cavities therewithin provided to generate musical tones of a variety of pitches (col. 3, lines 41-43 and lines 47-49).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Cohen to have clave block bodies with

equal exterior dimensions but different volumes of the open cavities, as taught by DeArmas, in order to provide a set of similar clave blocks for generating musical tones of a variety of pitches (DeArmas, col. 3, lines 47-49).

Regarding claim 2 and 3, Cohen in view of DeArmas teach the percussion musical instrument that includes the subject matter discussed above except: said set includes three clave blocks including a low pitch clave block provided to generate a low pitch tone, a medium pitch clave block provided to generate a medium pitch tone and a high pitch clave block provided to generate a high pitch tone.

However, in view of the teachings of Cohen and DeArmas, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the combination of Cohen and DeArmas to make three clave blocks corresponding to three different favorable values of pitch tone, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claims 4 and 8, Cohen does not mention expressly: said body of at least one of said clave blocks has a mounting ring; said cavities include openings having different perimeters.

DeArmas teaches: said body of at least one of said clave blocks has a mounting ring (16); said cavities include openings having different perimeters (col. 3, lines 47-49).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Cohen to have clave block bodies with equal exterior dimensions but different volumes of the open cavities, as taught by

DeArmas, in order to provide a set of similar clave blocks that are mounted together for generating musical tones of a variety of pitches (DeArmas, col. 3, lines 47-49).

3. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen in view of DeArmas, as applied to claim 1 above, and further in view of Cohen et al. (4,898,061).

Cohen in view of DeArmas teach the percussion instrument including the subject matter discussed above except: said body of each of said clave blocks is made of plastic material; said body of each of said clave blocks is made by injection molding process.

Cohen et al. disclose a clave block (10), including: a rigid body made of a solid material (col. 3, lines 19-25), said body of each of said clave blocks is made of plastic material (col. 2, lines 22-25); said body of each of said clave blocks is made by injection molding process (col. 2, lines 58-59).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Cohen et al. into the combination of Cohen and DeArmas in order to provide a cost-effective mechanism for making a plurality of clave blocks for reproducing the sound of a wood block instrument without using wood (col. 2, lines 20-25, lines 58-59).

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen in view of DeArmas, as applied to claim 1 above, and further in view of Shimoda et al. (4,779,507).

Cohen in view of DeArmas teach the percussion instrument including the subject matter discussed above except: said bodies of different volumes having different thickness of said solid material.

Shimoda et al. teach a percussive musical instrument such as a wood block, including three plates (21, 22 and 13) of different volumes having different thickness of said solid material, wherein when the plates are struck musical tones of different pitches are generated (cols. 2-3, lines 62-45).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Shimoda et al. into the combination of Cohen and DeArmas in order to provide a cost-effective mechanism for making a plurality of clave blocks that can generate musical tones of different pitches (Shimoda et al., col. 3, lines 32-34).

### ***Response to Arguments***

5. Applicant's arguments received 10/12/2006 with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

Claims 1-8 are rejected as new prior art references (U.S. Pat. No. 3893363 to Cohen, U.S. Pat. No. 4362080 to DeArmas) have been found to teach, together with other cited references, the claimed invention. Detailed response is given in sections 2-4 as set forth above in this Office Action.

**Contact Information**

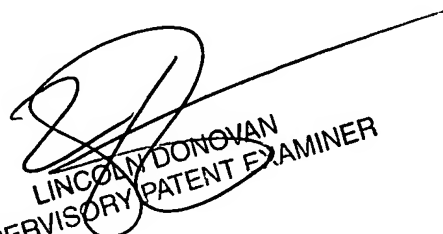
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jianchun Qin whose telephone number is (571) 272-5981. The examiner can normally be reached on 8am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jianchun Qin  
Examiner  
Art Unit 2837

JQJQ

  
LINCOLN DONOVAN  
SUPERVISORY PATENT EXAMINER